

energized

Volume 5

THE MONTHLY NEWSLETTER FOR ENERGY MANAGERS AND PUBLIC AFFAIRS OFFICERS

Issue 12

Message To Energy Managers:

Energy awareness is catching hold. Read about the innovative events staged by Marine Corps Base Camp Lejeune, Marine Corps Air Station Cherry Point, and Portsmouth Naval Shipyard.

With natural gas prices rising to record levels, pay special attention to reducing your natural gas consumption.

Congratulations to Navy Pensacola Region, winner of both 2000 SECNAV and FEMP energy awards. Faced with a deteriorating natural gas line, Pensacola found a solution in high efficiency geothermal heat pumps with water heating capability.

Sincerely,



William F. Tayler
Navy Shore Energy
Program Manager

Marine Bases Join Forces to Raise Awareness Or "Hey, Can I Get One of Those?"

Marine Corps Base Camp Lejeune and Marine Corps Air Station Cherry Point, located about 45 minutes apart, pooled resources for this year's Energy Awareness Week events. Energy Manager Jim Sides of Camp Lejeune and Energy Manager Joe Jackson of Cherry Point created an energy

awareness booth, complete with a Ground Coupled Heat Pump (GCHP), and displayed it at both bases during the week.

The working GCHP, supplied by the manufacturer, as well as other energy awareness materials (posters, handouts, etc.) really caught people's interest, drawing them in to the booth. They then explained the operation of the unit and how it will not only save the base energy but also improve their quality of life.

Not only housing residents but off-base residents as well were very much interested in getting a geothermal heat pump installed in their units. "Hey, can I get one of those for my own house?" they asked Jim Sides.

Approximately 862 units of a planned 2,093 units are already installed in Family Housing units at Camp Lejeune. Two Bachelor Officers Quarters (BOQs) at MCAS Cherry Point are equipped with geothermal heat pumps, and the Station plans to kick off a project this fiscal year to install geothermal heat pumps in Family Housing units.

Once they had their audience's attention, Jim and Joe then went further into explaining the federal mandates to which the bases are subjected. This educational event greatly improved the awareness of personnel on the bases and was a great "kickoff" for this year's energy awareness programs.

For more information, contact Jim Sides at 910-451-5642; E-mail: SidesJC@lejeune.usmc.mil or Joe Jackson at 252-466-4703; E-mail: jacksonjg@cherrypoint.usmc.mil.



Jim Sides at Marine Corps Base Camp Lejeune



Joe Jackson at Marine Corps Air Station Cherry Point

DON Energy Awareness Website: Access the tools on the Navy Energy website for ideas, planning tips, and tools. Set your browser to <http://energy.navy.mil> and scroll down the left-hand column to the Awareness pick.

Take Steps to Lower Costs of Soaring Natural Gas

With natural gas reaching historic price levels, taking steps to promote efficiency and conservation can be especially rewarding.

There are three ways to reduce natural gas costs:

- 1) Improve the efficiency of natural gas-fired equipment.
- 2) Encourage personnel to conserve.
- 3) Switch to a less expensive fuel if the facility has dual fuel capacity.

If you haven't already, contact the local natural gas utility and start a dialogue and working relationship to increase the efficiency of natural gas usage.

Don't limit your efforts to natural gas conservation. Conserving electricity indirectly helps conserve natural gas and lower natural gas prices since a lot of utilities use natural gas to generate electricity. Reducing overall electricity demand frees up some of the supply of natural gas consumed by electric utilities, exerting downward pressure on the price of natural gas.

Make sure energy management guidelines stipulated in OPNAVINST 4100.5D are strictly adhered to.

Weatherize all buildings as appropriate for facility type, use, and location. Caulk and weatherstrip doors and windows, and seal all holes where utilities penetrate the building envelope. Insulate where appropriate to levels that are cost effective to your location.

Operate all heating and power plants at optimum efficiency at all loads. Check the combustion efficiency of all boilers that are continuously manned every 8 hours to ensure that efficiency is within 5 percent of optimum efficiency. Check the combustion efficiency of all other boilers with 350,000 BTU per hour input capacity or greater at least monthly.

If your base has central steam heating, be vigilant about inspecting steam traps. Repair steam leaks promptly. Replacing failed traps is probably the most cost-effective measure you can take. Add insulation to all bare steam piping, including valves.

For other HVAC equipment, pay particular attention to calibration and adjustment of controls, reduction of damper air leakage, and efficient operation of chilled water systems.

Don't use stoves for heating purposes.

TEMPERATURE SETTINGS

SPACE HEATING

In bachelor quarters, administrative spaces, and family housing, set temperatures no higher than 70° F (21.1°C) for spaces requiring comfort heating. During unoccupied hours, reduce temperatures to no higher than 55°F (12.8°C). Maintain temperatures in laboratories, shops, warehouses, and similar facilities to minimize energy consumption, with 55°F (12.8°C) being maximum for heating purposes in storage spaces. Set back temperatures at home at night and when unoccupied.

DOMESTIC HOT WATER

Set hot water temperatures for family housing without dishwashers at no higher than 120°F (48.9°C). Set hot water temperatures for family housing with dishwashers at no higher than 140°F (60.0°C). For special purposes such as laundries and galleys, maintain hot water temperatures to meet applicable operational requirements while minimizing energy consumption.

For other purposes, set temperatures no higher than 105°F (40.6°C) at point of use. Turn off domestic hot water circulating pumps and heating elements during unoccupied hours.

FOR MORE INFORMATION, CHECK OUT THE FOLLOWING SOURCES:

OPNAVINST 4100.5D and OPNAVINST 4100.6B:

<<http://energy.navy.mil/menus/legislttn.htm>>

Technology bulletins relating to boilers and steam traps:

<<http://energy.navy.mil/menus/boilers.htm>>

HVAC technology bulletins:

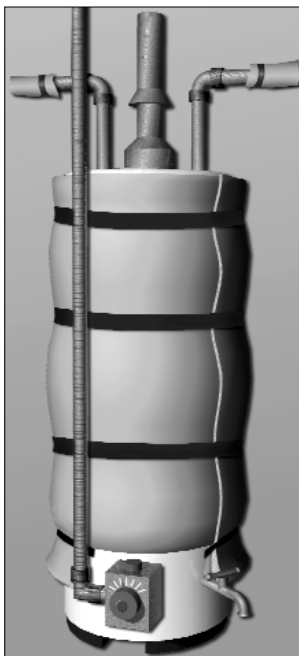
<<http://energy.navy.mil/menus/hvac.htm>>

FEMP Focus October 2000 Special issue:

<http://www.eren.doe.gov/femp/newsevents/femp_focus/oct00_special_contents.html>

American Gas Association:

<<http://www.aga.org/IssueFocus/EnergyConservationTips/2897.html>>



An energy lesson at Portsmouth Naval Shipyard

"Are you an Energy Wizard?" As a member of the Shipyard Energy Team, Dee-Dee Schussler observed Navy/Marine Corps Energy Awareness Week, October 23 - 27, spreading the word about energy conservation. During that week Dee-Dee spent time at the Shipyard Child Development Center talking to the children about energy savings ideas, and handing out stickers, posters and coloring books.

Based on a Periscope article that appeared in November 17, 2000.



SECNAV ENERGY AWARD WINNERS

NAVY PENSACOLA
REGION, FL, IS A
DOUBLE WINNER:

Winner of the FY99
Secretary of the Navy Energy
Award in the Large Activity
Category — receiving a mone-
etary award of \$45,000 and the
privilege of flying the SECNAV
energy flag for one year.

Winner of a 2000 U.S. Department
of Energy Federal Energy Management Program
(FEMP) Energy Efficiency/Energy Management Award
to an Organization.

In FY99, Navy Pensacola Region implemented
more than \$5 million in claimant-funded special
projects. Projects included replacing a 100-ton
chiller system, heating boilers, air handlers, and a

Navy Pensacola Region Recognized for Energy Savings:

WINS TWO HIGH-LEVEL ENERGY AWARDS

cooling tower; installing a 100-
HP boiler, window film, and
a variable air volume (VAV)
system; and renovating a
Bachelor Officers Quarters.

Centrally funded facility energy
improvements costing more
than \$4 million are projected to

save \$1.3 million annually.

Through a successful partnership
with the local electric utility

company, Gulf Power, Navy Pensacola Region
retrofitted 236 family housing units with geothermal
heating and cooling systems, with heat recovery
for domestic hot water.

***For more information, contact Lawrence Clifton at
850-452-4515 x352; Email: cliftonl@pwcpens.navy.mil***

Did You Know....

Repairing a failed open 3/8-inch steam
trap at 100 psig pressure saves 4,680,000
pounds of steam annually.

You save approximately one percent
of your heating costs for each degree
the thermostat is set back for a period
of 8 hours.

If your hot water heater is set at 140°
F, set it back to no higher than 120° F—
unless you have an old dishwasher that
does not have an internal heating ele-
ment that can raise the temperature to
140° F (the temperature needed for
detergents to clean effectively). You
could save over 18 percent of the ener-



gy used at the higher setting. Even
reducing the setting 10 degrees will
save more than six percent in water-
heating energy.

Savings up to nine percent have been
reported by adding an insulated blanket
over the hot water storage tank (especial-
ly if your tank is old and has little built-in
insulation). Three percent of the energy
used to heat water can be saved by insu-
lating the first 25 feet of distribution pipe.

If every gas-heated home were properly
caulked and weatherstripped, we'd save
enough natural gas each year to heat
about four million homes.



Check it Out

Construction Criteria Base Online

Did you find useful the DOD Energy Manager's Handbook? It was distributed as a PDF file on the Energy & Water Savings Programs CD-ROM as part of this year's promotional materials. It is just one of the more than 10,000 documents available online at Construction Criteria Base (CCB) Online at www.ccb.org. Operated by the National Institute of Building Sciences, CCB Online is an electronic library containing documents used in building design and construction, including guide specifications, manuals, handbooks, regulations, reference standards and other essential design and construction criteria documents.

Documents come directly from 22 Federal agencies and more than 110 industry organizations and are in PDF format. Some are also provided in a word processing format. Department of the Navy guide specifications are also in the SPECSINTACT specification processing program. Documents are organized first into Libraries (Specifications, Regulations, Codes, Standards, Documents, CADD, Energy and Environment, Sustainable Design), then by Source and Category (additional subdivisions). CCB is easy to search, and searches can be done in a variety of ways, including full text searches for any word in any document, fast title searches, and searches by source.

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<https://www.ccb.org/ccbsubscribe/Subsmain.asp>

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Watts News?

We want to hear from you.

Tell us about the energy initiatives you're working on, the problems you encounter, and the solutions you discover.

Submit article ideas, comments, or questions to:

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Be sure to include your name and commercial phone number.

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